



COVID-19 SUMP

Practitioner Briefing

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COVID-19 SUMP Practitioner Briefing

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This is a depiction of the lessons learned up to June 2020, with the then current experiences and knowledge about COVID-19.

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Foreword

European cities have long been challenged by the impact of air pollution, congestion, road crashes and climate change. Sustainable urban mobility plans (SUMP) have proven to be a valuable tool to help cities develop a long-term sustainable mobility vision, addressing multiple goals through integrated packages of measures.

Over the last months, our societies have been overwhelmed by an unprecedented crisis, which affected and disrupted our mobility systems. As urban mobility practitioners and decision makers, you have shown genuine leadership in your response to the COVID-19 crisis for which no known roadmap was available. You made sure that cities kept moving throughout the difficult confinement period, that people's health and safety was prioritised, and that the essential movement of people and goods continued.

Now that we are coming out of confinement, we face a new reality and new challenges to our mobility systems in terms of health and safety. This will undoubtedly have an impact on public transport, the backbone of our sustainable urban mobility ecosystem. We have to make sure our recovery from this crisis is smart and sustainable.

Nonetheless, for every challenge that the COVID-19 crisis brings in the field of mobility, there is also an opportunity, and the numerous actions that cities have taken inspire optimism. The Commission encourages and supports the development and implementation of new urban mobility solutions, indeed as we set out in our Communication of 13 May - we should take every opportunity to "build back better". Not only were health and safety measures introduced on public transport services that kept on running even at the peak of the pandemic, cities have also been implementing innovative mobility solutions by implementing pop-up bike lanes and widening pavements.

It is of course up to cities themselves, but no doubt some of these temporary measures, which also serve broader sustainable urban mobility goals, will have the opportunity to become a new norm over time. It was encouraging to see that it was often those cities with a very good SUMP in place that were most able to respond fast in this emergency situation, and most able to accelerate the implementation of planned sustainable mobility measures. I also encourage the further development of personal mobility solutions that are based on e-mobility and the sharing economy. We need to have a holistic approach and develop new and innovative ways to move around.

This practitioner briefing takes stock of all the good practices that cities have been introducing and still plan to implement as restrictions ease. More than ever, it is important to look to our peers and share expertise and experience. Therefore, I hope that these examples of good practice will inspire you to further navigate this crisis with actions of your own.

Looking at the uncertain future ahead, we must be proactive in shaping that future, to ensure it can result in the sustainable mobility ecosystem we have been working towards for many years. It is essential to keep our commitment to the European Green Deal, as our climate, health and environmental goals become even more important. This is why the European Commission's COVID-19 exit strategy for transport adopted in May 2020 also outlines specific measures to be taken in the field of public transport, shared mobility and active travel.

Europe is committed to supporting its towns and cities as they gradually recover from this crisis with resilience and excellence in sustainable urban mobility planning.

Henrik Hollei, Director-General of DG MOVE

1. Introduction

1.1 Why this document?

This document was drafted in June 2020. In most parts of Europe, local, national and European travel restrictions are now coming to an end and, in many places, economic sectors are now reopening. The European Commission has launched the Re-open EU website to help citizens to access real-time info to travel as safely as possible across the European Union¹.

The mobility sector has come centre stage for getting health workers to hospital, delivering food to people, distributing personal protective equipment, offering mobility options to those who are most deprived, and much more. The past months have proven the importance of Sustainable Urban Mobility Plans (SUMPs) in tackling emergency situations: SUMPs have established trust between urban mobility stakeholders, established decision-making procedures and put structures in place for implementing measures. The SUMP process has provided cities with a portfolio of fit-for-purpose measures to be fast-tracked to combat the impact of COVID-19 on mobility in urban centres, and also to create opportunities for people to make best use of the city and its public spaces.

In this document, we include lessons learned for immediate, mid-term and longer-term actions that European cities and regions are developing as we write. This Practitioners' Briefing provides a first quick scan of good practice examples and SUMP-related issues. The SUMP guidance editorial board commits itself to providing a more in-depth guidance document in autumn 2020, in the aftermath of COVID-19 (or in case of a second wave of infections) and to prepare for the future – whatever it brings.

1.2 Mobility approaches during lockdown - How cities responded

Governments were forced by the COVID-19 pandemic to take decisions and act rapidly, typically with national or regional governments determining the mobility restrictions and with local governments setting in place initiatives to respond to the situation of lockdown. In many cases emergency and resilience procedures were activated. For smaller authorities with more limited staff resources, this often meant diverting staff from their normal activities to undertake priority actions and provide support



to the most vulnerable members of their communities. Some of the key challenges encountered, and solutions that were put in place, are summarised below based on the experience of the cities involved in the SUMP PLUS project².

Crisis response and communication - First and foremost, the establishment of clear structures and lines of communication and decision-making were vital to enable city authorities to respond quickly and effectively. Klaipeda has a permanent Emergency Commission consisting of state politicians, senior civil servants and representatives of the military services. The Contingency Manager chaired the Emergency Commission and led an executive unit responsible for clear communication with all citizens and stakeholders. Manchester's Resilience Forum prepared the response to COVID-19 from late 2019 and

¹ reopen.europa.eu/en/

² sump-plus.eu/

Lucca's Municipal Emergency Organisation played a similar role as the lockdown area within Italy was extended.

Restricting non-essential movement - For the majority of people, lock-down came as an unprecedented restriction of personal movement, with only essential trips to buy food and household necessities, and for important care needs. Car use plummeted (in Antwerp city centre by as much as 80% in comparison with a similar day in March 2019) and many public transport operators reduced service provision, helping to protect key workers and to reflect the reduced demand. For example, in Greater Manchester, rail services were reduced to around 45% of the typical capacity with re-timetabling to help ensure specific hospital sites and key centres were served as well as possible.

Measures taken to make public transport safe, based on examples from Alba Iulia, Antwerp, Klaipeda, Lucca, Manchester and Platania, included: enhanced cleaning and disinfection regimes of vehicles and busy/central stations, waiting rooms at station closed, 'chess-board' seat-marking within vehicles and obligatory use of face masks, screens fitted in vehicles to protect drivers, and access to buses not allowed through the front doors to protect drivers.

While passenger numbers decreased dramatically, finding ways to enable key workers to continue to travel safely has been a significant challenge.

Mobility for key workers - The stark reduction of public transport and shared mobility options (e.g. car-sharing schemes) made it very difficult for a number of essential workers (nurses, logistic hospital staff, police, firemen, emergency services, port workers) to get to their workplace. For key workers, an easing of restrictions on using cars private cars was implemented, while cycling became a popular option in less-congested streets. In Lucca, the usual vehicular access restrictions to the historic city centre were suspended. Similarly, in Antwerp as well as in Brussels, parking and low emissions zone charges and restrictions were eased to ensure that key workers would not have problems commuting. Feedback received by the City of Antwerp from the healthcare sector was that using the shared bikes and scooters was not problematic, providing people carried disinfectant to clean the vehicles before use. In fact, health workers were given free passes for the bike-sharing scheme during the lockdown period. Health workers in Manchester were offered refurbished bicycles and a free tram pass. Special shuttle services were also organised. In the city of Budapest, the government decided to make parking free in the whole city to allow mobility having the unintended consequence of increased private car use and increased associated pollution³.

Mobility for people entering quarantine and COVID-19 patients - Bus operators in Klaipeda played an important role transporting people from the airport and port to quarantine locations, but where a person tested positive, they were taken to hospital by ambulance.

Delivery services for food and other essential needs - Community goodwill blossomed during the lockdown restrictions, with many offering to undertake shopping for neighbours in high risk groups. Nevertheless, cities and businesses also undertook steps to ensure that the most vulnerable people were looked after, particularly as it became difficult to book delivery slots as the demand for online grocery shopping spiked. For example, online orders of essentials goods in Antwerp exploded to such an extent that food stores and supermarket stopped their online shopping and shop & go facilities. In response to this, the City asked people to volunteer as 'personal' shoppers for their neighbours by means of two simple cards that people could put behind their front windows.

³ NAPI, [Ingyenes parkolás: nagyon kilóg a lóláb](#)

A range of related initiatives were founded in other SUMP PLUS cities. The Municipal Emergency Organisation (COC) of Lucca organised a network of food distribution for vulnerable residents and a group of volunteers was established in Alba Iulia to buy and deliver food to the homes of elderly people. In Manchester, the City Council Events Team and Taxi Compliance Team have supported the logistics of food distribution to the most vulnerable residents. Additionally, UK and Belgian supermarkets prioritised online grocery delivery slots to those falling in COVID-19 at-risk health groups.

Enabling a healthy living urban environment - Governments encouraged people to keep exercising during lockdown. Stay safe and active was the motto in a number of regions. This led to a huge pressure on the limited amount of open space in cities: bike lanes became crammed with enthusiastic cyclists and in some cities bike jams created a health hazard. Similar things happened with runners and hikers in city parks, with it becoming very difficult to observe basic physical distancing rules. Such situations led to some cities announcing unprecedented measures. For example, for the first time in the history of the town, the medieval walls of Lucca (a very popular recreational route for walkers and joggers) was closed to people. They have since reopened, on 4th May. A number of researchers in a letter posted at the IASS Potsdam – Institute for Advanced Sustainability Studies e.V. website were calling decision makers to keep park opens and enable safe active mobility (walking and cycling) as much as possible, to harvest health benefits⁴.

1.3 Understanding the mobility impacts

Lockdown has made considerable impact on travel demand and the mode of transport we choose. This is a unique situation, with only essential journeys being made, people rediscovering their immediate surroundings, and neighbourhoods becoming places to walk and cycle.

Travel patterns during lockdown⁵ were highly dependent on national and local travel regulations⁶. It is clear that public transport was severely impacted, particularly in the early stages of lockdown. Walking and cycling proved to be the preferred mode in cities, combining the 'active' element (physical exercise) with the travel objective. That resulted in additional health benefits, reducing physical inactivity, a key risk factor of non-communicable diseases.

One widely reported issue is that of drivers taking advantage of emptier roads, possibly resulting in a higher proportion than normal of speeding, sometimes to a very excessive degree⁷. Another impact of lockdown measures were temporarily improved air quality due to significantly reduced transport related air pollution⁸.

Understanding offer AND demand

Local authorities are challenged in their SUMP execution on both sides of the mobility equation: offer AND demand.

Offer: not all services may be operational at full force – public as well as private operators. The market for private mobility services is experiencing a shock⁹. Public space is under pressure, as cities need to absorb the shift from collective modes to active travel modes to combat congestion, and pedestrians require space to safely physical distance.

⁴ IASS Potsdam, [Covid-19 Pandemie: Sicheren Fußverkehr und Radfahren ermöglichen](#)

⁵ We count, [COVID-19: Citizens science reveals changing travel habits](#)

⁶ Travel was not only restricted: cities also suspended restricting measures (UVAR - LEZ, paid parking)

⁷ ETSC, [COVID-19: Huge drop in traffic in Europe, but impact on road deaths unclear](#)

⁸ https://drive.google.com/drive/folders/1Dj4kCGMX5NBdeO9AY3_wq-lck5PCJdd

⁹ Cities today, [Scooter-sharing expected to bounce back from COVID-19 crisis.](#)



Figure 1 – mapping sidewalks width in Milan (by Systematica)

Demand: attitudes and travel needs have changed. People have experienced a different mobility situation, they understood that cities can be organised otherwise and both safe-active mobility and clean air is achievable. Moreover, they are ready to accept policy changes needed for that modal shift¹⁰.

Cities should establish sustainable mechanisms to measure and monitor both elements – offer and demand. The gradual easing of lockdown restrictions for new travel segments (school, commuting, shopping, leisure, tourism, etc.) represents a great opportunity to understand the urban mobility ecosystem.

Behavioural change

COVID-19 travel restriction measures have made people push the ‘pause’ button for their travel behaviour. But is it also a ‘reset’ button? People are ready to use healthy and safe active mobility options if they are accessible, available, and affordable. Travel-behavioural science proves that life-changing events have the potential to become mobility-changing events¹¹. Two changes with huge mobility impacts spring to mind:

March-May 2020 was a large-scale experiment for **teleworking**, with individuals, organisations and society quickly adapting to the new normal.

Without the option to physically go shopping, people ordered online, and even products that were previously ‘physical’ shopping items (e.g. furniture) moved into the **e-commerce** sphere.

Attitudinal change

In a major international survey of public opinion in six European countries, just under two out of every three people (64%) on average said they do not want to go back to pre-COVID-19 pollution levels. Roughly the same proportion (68%) agreed that cities must take effective measures to protect citizens from air pollution, even if it means preventing polluting cars from entering city centres to protect clean air, with as many as 63% of drivers themselves in support. Around three quarters (74%) of respondents said cities must take effective measures to protect citizens from air pollution, even if this requires reallocating public space to walking, cycling and public transport, with just 10% opposed. Even though there is reluctance to use public transport due to the potential risk of contagion, regular users of buses and trains said hygiene is a deal-breaker. Four in five people (81%) who primarily used public transport before the pandemic are willing to return: 54% said they will start riding buses, trams and trains again if sufficient hygiene measures are taken to prevent Covid-19 contagion; the remaining 27% are set to return regardless of risk¹².

¹⁰ EPHA, [No going back: European public opinion on air pollution in the Covid-19 era](#)

¹¹ Wood et al., [Habits in Everyday Life: Thought, Emotion, and Action](#)

¹² Transport and Environment, <https://www.transportenvironment.org/sites/te/files/Transport-and-Environment-Merge-2020.xlsx>

Back to 'normal'?

But how will the situation evolve from here onwards? The rebound that is currently coming into effect shows many – sometimes contradictory – sides of urban mobility. Congestion is reportedly back to pre-COVID levels^{13 14} in some cities. Air pollution is returning to China after a Covid-19 lockdown low, new satellite images show¹⁵ as this can be expected elsewhere in Europe. In Wuhan, a 'boom' in car sales has been reported¹⁶.

1.4 The challenges ahead

The challenges in the future refer to two different timescales: firstly, the Post-COVID-19 medium-term period when the first emergency restrictions are relaxed and re-shaped in order to mitigate against the risk of a second wave of infections; and secondly, the longer-term planning when the experience and lessons learnt during/after the crisis are properly assessed and the most effective measures are retained in order to help guard against any potential replication of a pandemic in the future.

In the medium-term, and from the perspective of **passenger mobility**, there is a major concern that people will avoid using public and shared modes of transport, resulting in an “uncontrolled” increase in car use in the medium and long term period in our cities. Preventing a reversal of the air quality benefits and reduced congestion we have seen in cities requires an integrated approach addressing the challenges for active travel, public transport and shared mobility, as described in Sections 3.1, 3.2 and 3.3. To complement this, cities need to address the challenge of **managing the travel demand**, considering how peaks in trips at certain times of day could be flattened. Approaches may involve the differentiation of public service/offices entry hours (to balance from peak and low demand time) and by reducing the need to travel. All the SUMP PLUS cities introduced teleworking and remote education as far as possible, exploiting the opportunity given by IT tools.

In order to cater for increasing **logistics demands**, cooperation schemes among the operators must be improved in order to optimize the load factors of vehicles (taking advantage of the abilities of IT platforms to match demand/offer); the role of incentives to access the city centre (in favour of the most sustainable delivery modes - i.e. EV and cargo-bikes) must be better explored together with a more flexible regulation. These are some of the key actions taking place in Lucca where the access restrictions to the city centre are gradually being restored after COVID-19 suspension.

¹³ RAC, [Traffic set to exceed pre-pandemic levels as lockdown restrictions loosen](#)

¹⁴ The Guardian, ['Surprisingly rapid' rebound in carbon emissions post-lockdown](#)

¹⁵ https://drive.google.com/drive/folders/1023Ta5HS5qr0mwYhHI_KE5qINMj_vvNi

¹⁶ Automotive news, [Quick rebound in Wuhan car sales give hope to battered industry](#)

2. Services and policies

For this practitioners' guide, we are focusing on three measures areas that have been mentioned by the European Commission in its recommendations for the exit from the COVID-19 lockdown: cycling and walking and urban space reallocation, public transport, and shared mobility. In the full SUMP and COVID-19 topic guide, to be issued in autumn 2020, a broader range of urban mobility measures will be considered, including UVAR, parking and urban freight logistics.

The measures areas mentioned below interact and can mutually reinforce each other. E.g. Cities and regions are taking action with regards to cycling and walking, and shared mobility often are prioritised to compensate for the expected drop in public transport usage. On the other hand, both public transport and shared mobility depend on the use of public space, and on an efficient allocation for each mode.

Specific requirements may occur for insular and/or EU tourism destinations taking into account seasonality of the travel demand and the high number of travellers that is unacquainted with local travel conditions and habits.

Each measure sheet includes immediate actions, mid-term and long-term considerations. These sections provide synthetic information, and the reader is recommended to visit the 'further reading' and references sections to look at more detailed and specific information.

2.1 Measure sheet: reallocation of space to promote active travel

As mentioned above, walking and cycling emerged during the lockdown as viable mobility options for essential trips. In addition to being sustainable and active modes they are individual, and thus meet physical distancing requirements. As such, the World Health Organization recommended walking and cycling for essential trips whenever feasible (WHO, 2020).

One of the most important revelations of the pandemic was the disproportionate distribution of public space in favour of motorised traffic. With cars accounting for ~30-40% of journeys and occupying ~70-80% of public space in European cities, there is often insufficient space left for people to walk and cycle whilst complying with social distancing requirements. This situation, caused by car-centred design and planning of cities, poses not only environmental and space efficiency problems, but also results in the increased transmission of diseases like COVID-19.

The European Commission guidelines on restoring transport post-lockdown include considerations for active travel. In relation to space reallocation, the guidelines specify that *urban areas could consider temporary enlargements of pavements and increased space for active mobility options*. The guidelines also recommend *reducing speed limits of vehicles in increased active mobility areas*¹⁷.



¹⁷ European Commission, [Guidelines on the progressive restoration of transport services and connectivity – COVID-19 2020/C 169/02](#)

2.1.1 Current and short-term action (lockdown)

During lockdown, cities around the world took action to implement temporary measures, such as the widening of pavements and the roll-out of temporary cycle lanes, to quickly respace their streets and enable physical distancing for walking and cycling. Starting with a few actions in late March 2020, there are currently over 600 solutions worldwide according to crowdsourcing datasets (Combs, 2020).

The rate of change in cities to adapt to new conditions during the COVID-19 pandemic has been impressive. Despite the technical, legal and administrative challenges, measures have been implemented almost overnight as local authorities acted to keep people safe whilst moving. This experience has demonstrated that local authorities can be responsive and agile in times of need, and that respacing streets to promote active travel does not always require large amounts of money, complex design, nor time-consuming administrative processes. In many cities with large-scale implementation, it appears that political support, partnerships between transportation organisations, public health officials, and community input spurred innovation.

Technical specifications. *Quickly-deployed infrastructure is not necessarily synonymous with poor quality infrastructure. Technical guidance is available which provides a good foundation for planning safe, temporary infrastructure that can be implemented almost immediately in towns and cities. Examples of these guidelines are those developed by Mobycon¹⁸ and Cerema¹⁹. Safety of pedestrians and cyclists at intersections needs particular attention.*

Goals such as access for people with disabilities and road safety must not be overlooked in the rush to implement infrastructure measures.

2.1.2 Mid-term actions (post-lockdown)

The actions taken by cities during lockdown have been encouraging, and momentum has been created for active mobility and temporary space reallocation measures to become permanent. Some cities in Europe are now including space reallocation measures to promote active travel in their post-lockdown mobility plans, building on the actions taken during lockdown and in the early stages of the post-lockdown phase. Countries have also acted to provide a supporting framework, and this framework includes funding that has been announced and in some cases made available²⁰.

Walking

Giving more space to pedestrians is not only important for safe physical distancing, but also for the general liveability of cities. Space reallocation measures for walking have two main purposes:

- **give room to move:** repurposing parking spaces and road space to support physical distancing and travel connections.
- **give room to queue:** widening pavements for queuing by repurposing curb-side lanes, providing space for people to line up while giving pedestrians room to pass by. Priority is given to waiting areas associated with essential activities (food shops, health infrastructure, pharmacies and public transport stations).

¹⁸ Mobycon, [Making safe space for cycling in 10 days](#)

¹⁹ CEREMA, [Aménagements cyclables provisoires : tester pour aménager durablement](#)

²⁰ POLIS network, [UK](#) and [France](#) funding

Good practice	<p><i>The London's Mayor's Streetspace Plan²¹ tackles both approaches, reducing traffic on residential streets to create low-traffic neighbourhoods, and prioritising space reallocation around certain public transport stations to reduce crowding. The Mayor's Streetspace Plan focuses on encouraging local journeys by foot or by bike. The improvements to street space should not be limited to city centres but should also include peripheral neighbourhoods to help people move more easily and safely in the areas they live.</i></p>	
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Cycling

Creating safe and segregated cycling infrastructure is essential to ensure cyclists are physically safe and feel safe. This is particularly important to make cycling an option for a wide range of ages and abilities post-lockdown. Against the backdrop of the decreased use and capacity of public transport, cycling will become a key alternative for short- and medium- distance journeys. In the mid-term, efforts must be made to follow a network approach for cycling infrastructure²². This will reduce the pressure on individual streets and allow for people to cycle throughout the city with confidence and safety.

Good practice	<p><i>Ile-de-France has committed to making improvements to cycling infrastructure, as well as providing better connectivity within the network. An ambitious plan for 650 km of cycle paths across the region has been brought forward as a result of the current pandemic, with 250 km of temporary bike lanes being implemented in the near future. The RER-V cycling network 'replicates' the urban train network of the Ile-de-France region, to provide an alternative to public transport. The RER-V project is also an answer to the lack of continuity of cycle paths in Ile-de-France.</i></p>	
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Other cities which have emerged from lockdown with cycling network plans include Brussels, Rome, London, Milan and Lisbon.

Speed reduction measures / slow streets

Many cities are reducing speed limits, especially on residential streets during lockdown and planning to extend into post-lockdown to ensure safe walking and cycling for a large number of users. Lower vehicle speeds enable safer, healthier and more liveable environments.

²¹ POLIS network, [Post-Lockdown Mobility report: Reallocation of road space to promote active travel](#)

²² Mobycon, [Making safe space for cycling in 10 days](#)

Good practice	<p>Brussels Region</p> <p><i>Brussels is creating a safer city where people have priority by fast-tracking pre-existing long-term plans in response to COVID-19²³. A 'neighbourhood' approach will be taken to give greater priority to movement on foot and by bike and create a more welcoming urban environment. 'Slow streets' will be rolled out across the city to allow people to move more freely in streets by reducing vehicle speeds to 20km/h and providing more space for walking and cycling. This will be complemented by a city-wide 30 km/h standard speed limit from 2021. In addition to this, Brussels has also adapted the traffic signals to reduce waiting time for cyclists and pedestrians.</i></p>
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In some cases, space reallocation is also important for the survival of shops and restaurants so that they can space out their customers on pavements. The City of Vancouver has plans to install 50 km of 'slow streets' (12 km of which have already been installed) to help residents and businesses adapt to the new reality²⁴.

Police in different cities have reported a rise in speeding in quieter roads as a result of coronavirus-related travel restrictions²⁵. In the midterm, the fight against speeding must remain a priority.

Spatial Design opportunities

Space reallocation is not only important for mobility but for urban liveability in general. Several cities have been reallocating space from cars to create more enjoyable, attractive spaces. Strategies for this include the creation of parklets, the installation of climate adaptation elements (e.g. shade) and the installation of urban art. All these elements are included in **Lisbon's A Rua e Sua** (The Street is Yours) plan.

Open streets

Open streets are entire streets open to cyclists and pedestrians but closed to all but emergency/essential car access. In **Milan, the Strade Aperte** (Open Streets) project seeks to prioritise movement on foot and by bike in a number of ways. Pedestrians will be given the greatest priority by widening pavements, implementing tactical urbanism approaches such as 'parklets', and closing some streets to traffic altogether. Open streets can be used as play streets, school streets or markets²⁶ (NACTO, 2020). Respacing can also support teleworking, by creating physical environments in urban areas where children can safely play on the street. Pleasant, sufficient and green outdoor spaces are also extremely important for physical and mental wellbeing.



²³ POLIS network, [Post-Lockdown Mobility webinar report: The post-lockdown strategies of Aarhus and Brussels](#)

²⁴ Vancouver is awesome, [City of Vancouver to install 50 km of 'slow streets' and use roadways for patios](#)

²⁵ BBC, [Coronavirus: Driver speeding at 132mph during lockdown](#)

²⁶ NACTO, [Streets for Pandemic Response and Recovery](#)

2.1.3 Preparing for the long term

Communicating the benefits. General communication about infrastructure measures is essential. Automatically counting pedestrians and cyclists, as done in the city of Paris²⁷, can be a good way to communicate about the use of cycling infrastructure.

Collecting feedback. UK charity Sustrans created a tool to collect feedback from the public on the different space reallocation measures implemented across the UK and report back to local authorities²⁸. These tools can be used to for the purpose of future policy and planning.

Supporting local businesses: Space reallocation measures can also be used to reactivate local businesses, as claimed by recent research from Transport for London (TfL) and University College London (UCL)²⁹.

Enabling deliveries. Space reallocation measures can be done considering the needs of the urban logistics sector. It is important to identify how to best accommodate deliveries and drop offs on streets where loading bays and on-street parking have been removed.

Enforcing & educating. In order to prevent the new infrastructure from being misused, enforcement and education are key. While the cost of temporary infrastructure is relatively low, the enforcement costs are not to be ignored, and they require coordination with other budgets (e.g. police budgets).

Political support and leadership. In many of the cities which have quickly implemented reallocation measures, a mayor or council member is often included or at the forefront of the decision (and in the media). Leveraging political support is crucial.

Partnerships with public health officials, departments and NGOs. Such strategic partnerships offer valuable perspectives, evidence-driven evaluation, and buy-in for future transitions to permanence.

Towards the 15-minute city. There is a strong link between potential for active travel and urban layout: complex, dense and compact urban fabrics are more suitable for walking and cycling. It is also important to consider the role of cycling in intermodal mobility.

Planning now for the long term. When feasible, temporary measures must be made permanent. The rapid deployment of emergency cycle lanes is usually linked to long-term strategic planning. There is a need to build now what we wish to have in the future: more sustainable and resilient mobility ecosystems.

2.2 Measure sheet: public transport

Public transport has been a factor of stability during lockdown, with operators continuing to provide an essential service for those that still needed to travel– and even serving as medical transport³⁰. Public transport is the backbone of urban mobility and offers efficient and sustainable transit. With physical distancing requirements, how can public transport adapt and respond? Restoring trust between public transport operators, staff and passengers will be key to recover passenger numbers while keeping everyone safe when travelling. A viable, sustainable public transport is needed for those who do not have other transport alternatives.

²⁷ The local, [Why cyclists in Paris are more numerous than ever](#)

²⁸ Sustrans, [Space to move](#)

²⁹ Transport for London, [The value of street improvements Summary Report](#)

³⁰ Info Barcelona, [Solidarity buses transport hospital patients to isolation facilities](#)

2.2.1 EC Guidelines on the progressive restoration of transport services and connectivity

What the EC recommends for public transport:

- To prepare for times when passenger numbers increase, measures should be put in place to ensure the highest safety for passengers, such as safe physical distancing, isolating drivers from passengers, increasing operational frequency to allow for safe distancing, and automated door operations.
- Measures should be clearly communicated to passengers to facilitate their smooth implementation, reassure people and maintain their confidence in public transport (e.g. communications campaigns)
- Many of the measures that might be required have effects that go beyond the remit of public transport and should be developed in cooperation with health authorities and other stakeholders



2.2.2 Current and short-term actions

Clear goals

Successful public transport authorities and operators have established clear goals to achieve within the exit strategy. These goals help to shape operational measures. For instance, the authority overseeing public transport in Dublin, IE, has set these objectives³¹:

- Ensure safe access to, and movement within, Dublin City for all users
- Provide sufficient movement and mobility capacity to cater for the changed travel patterns
- Support the economic recovery of the city and the region.

The strength of these objectives is that they serve the economic relaunch of the city, that they take into account that the travel behaviour and user needs have changed, and that basic safety levels need to be reached for all user categories including those with special needs.

Safe offer for staff and passengers

Île-de-France³² region casts light on how to ensure safe public transport. Capacity is key: the number of services that was reduced during lockdown is being reinstated to 'normal schedules'. This frees up capacity to allow physical distancing to be respected as much as possible, and helps passengers to feel more comfortable. All public transport related assets – vehicles, stations, bus stops, vending and check in machines – are subject to reinforced cleaning and disinfection. The cleaning and disinfection is structured, monitored and reported. It should be visible to commuters. In many places, cleaning and disinfection measures are carried out in front of the commuters throughout the day.

With the help of signs/infographics operators further prove the multiple actions they are taking to ensure safety- such as no cash payments, only rear door entry and exit, blocking certain seats to ensure safe physical distancing. Commuters need to repeatedly see and believe that their safety is a top priority and that everything is being done to ensure this. As public transport staff are front-line workers, the provision of personal protective equipment takes priority.

The MoTiV project also found the most importance experience factor reported by both satisfied and dissatisfied public transport users was seating quality and personal space. This is interesting: since

³¹ NTA, [Enabling the City to Return to Work](#)

³² Île-de-France Mobilités, [Déconfinement Covid 19 : Propositions d'Île-de-France Mobilités en matière de mobilités](#)

distancing measures require more space in public transport, this is likely also to influence the experience of travellers in a positive way and therefore to make public transport more pleasant and attractive³³.

Clear and simple rules for public transport users: "the journey continues, but we will do it in a different way"³⁴

Local public transport journeys are often routine journeys, where passengers don't necessarily reflect on their behaviour. COVID-19 requires from passengers to reconsider their behaviour, and change their routine. Simple and clear rules are key in this regard. As an example, the Catalunya region has issued three simple principles for travelling: 1) the use of a mask is mandatory on public transport, 2) Keep a safe distance from other passengers, 3) avoid the busiest travelling hours.



Good communication and information

The transition from a period of clear restrictions (lock down with – in most countries – its essential journeys-only policy) to a situation that requires more consideration and decision making from the individual traveller, needs good communication and information. Gradually more categories of travellers will travel – including tourists with language requirements. Some operators have suspended the validation of tickets. If this requirement returns, it this should be made clear to the user. Several cities and regions are providing app-based information to show passengers bus occupancy levels. Communication can also be targeted at staff to thank them for their hard work and provide guidance on what steps to take to stay safe at work³⁵.

Leave no one behind

The efforts that public transport authorities and operators are taking to improve the accessibility of the system and thus the autonomy of passengers with reduced mobility (PRMs) should not be discontinued under the current circumstances. Madrid's mobility operator EMT has made efforts to extend its collaboration with PRM stakeholder bodies (titled 'Creemos en tu Autonomia' - 'We believe in your autonomy' focusing on learning disabilities) to a specific campaign, launched post-lockdown, focusing on helping those passengers most in need to have access and comfort when travelling on buses. Focusing on the key message 'Don't leave anyone behind', the campaign encourages all passengers to assist vulnerable groups by helping them to their seats, keeping a safe physical distance and respecting priority seating.

2.2.3 Mid-term actions

Think multi-modal to de-crowd... and to keep the city moving

In case the public transport capacity does not enable safe distancing and regular cleaning (making vehicles unavailable for short periods of time), especially during rush hours, public transport authorities can promote or even organise a shift towards other collective, shared and sustainable mobility solutions (see section on 3.3 Shared Mobility). This is already happening around Europe, but the current ad hoc approaches might need further elaboration and detail.

In saturated urban mobility systems, all modes count to keep the city moving. Small reductions in public transport use can have a large impact on urban congestion – if more travellers choose to travel by car. Several cities and regions³⁶ therefore focus on walking and cycling to capture this travel demand in a space-efficient way or integrated shared mobility services in the collective transport system.

³³ Motiv, [Outlook on Value of Travel Time: Futures Study and Related Hypotheses](#)

³⁴ POLIS network, [Catalonia launches public transport campaign for post-lockdown travel](#)

³⁵ Carris.pt is managing such a campaign, and EMT Madrid has rewarded drivers that had volunteered to run the new services to temporary emergency hospitals

³⁶ Paris, London, Brussels, but also smaller Belgian cities such as Leuven, and many more.

Infrastructure measure to allow for safe and comfortable waiting at bus stops and at interchanges

Cities are not only freeing up space for walking and cycling, but also to allow for physical distancing at bus stops. Recent experience from Transport for London³⁷ in this regard are documented to support other cities that want to address this problem. The strategy in Paris is to provide new cycling routes that directly duplicate the mass transit network, allowing for a temporary switch for travellers between the two transport networks.



Money matters

With revenue having plummeted since the lockdown started in a context of limited but still substantial service provision, although with costs are still being incurred to COVID-19-proof public transport facilities and operations, the public transport operators are under severe financial stress. The coming period will be important to see how management contracts are being revisited to ensure the financial viability of the sector. Free or reduced cost travel schemes for health and social workers³⁸ could be reconsidered as normal life resumes. Cities and regions should closely monitor the direct financial support as well as indirect support mechanisms (state aid exemptions etc.) provided at national and European level. Re-assessment of funding and governance frameworks that are more resilient to changes in travel demand need to be envisaged, with the French Versement Transport³⁹ as best practice. Also congestion charging and road pricing comes into view.

2.2.4 Preparing for the long-term

Cities and regions need to ensure that public transport can continue to contribute to the goals set in the local or regional SUMPs, without compromising on health and safety requirements. The overall resilience of public transport systems will have to increase and, – in case of a second wave of COVID-19, network scenarios should be ready. There is the need to ensure long-term funding stability, enabling capital expenditure and operational expenditure planning in the SUMP framework, with public transport being critical for the implementation of these plans.

COVID-19 also brings other challenges to the vehicle fleet, with the need for good ventilation systems, virus-resistant materials, and the availability of sanitising systems on board. This might require specific retrofitting schemes.

³⁷ Transport for London, [Streetspace for people](#)

³⁸ About Manchester, [Greater Manchester Covid update-Free Metrolink for NHS and social workers announced from this weekend](#)

³⁹ Economie.gouv.fr, [Le versement transport, ça vous concerne?](#)

Good practice	<p>Madrid has announced a range of public transport measures to respond to the ongoing COVID-19 restrictions. The new plans include a 'de-escalation plan' for EMT (the city's public transport operator). The plan sets out steps to guarantee the provision of public services whilst keeping employees and passengers safe. The plan is based on several key pillars: guaranteeing and maintaining the health and safety of workers and users, guaranteeing provision of the public transport services that EMT is entrusted with, and restoring confidence in the use of public transport.</p> <p>An additional 45km of bus lanes will be rolled out across the city. The increase in bus lanes is intended to facilitate the circulation of buses, improving the speed of operations and, therefore, the supply of seats provided by EMT. It is estimated that this initiative will increase the number of places available by 32,000, enabling greater social distancing</p> <p>Madrid also announced it was reinstating 90% of the city's bus fleet to service on working days at peak hours in the face of the first stage of de-escalation. This would see more than 1,600 buses circulating in Madrid during peak hours. In off-peak hours, the fleet is reduced to 70% of normal operations.</p> <p>A new communications campaign will also be launched to make it easier for disabled people to travel by bus as de-escalation begins. The campaign will focus on encouraging courtesy, such as respecting the priority of seats for people with disabilities, people with reduced mobility, pregnant women or the elderly, which can be essential to guarantee their mobility.</p> <p>Other mobility measures are being rolled out, including temporary traffic restrictions at weekends and during holidays, and new measures to support shared vehicles.</p>
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2.3 Measure sheet: shared mobility

Shared mobility operators can now prove their business case by providing sustainable and affordable alternatives and at the same time, relieving the pressure from public transport. New public-private partnerships and business models are needed to support the transition to integrated sustainable mobility, and shared mobility operators can play an active role in ensuring that cities can recover sustainably from COVID-19.



As well as publicly-owned bike-sharing schemes, private operators are a key player in the shared mobility sector. This section - in comparison with the public transport section above - includes more best practice examples from private companies, due to the predominance of private shared mobility operators in the sector.

2.3.1 EC Guidelines on the progressive restoration of transport services and connectivity

- Shared mobility companies should take specific steps to protect drivers and passengers from infection
- Rental vehicles should be thoroughly disinfected after each use, and vehicles used for car-sharing should be disinfected at least once every day of use
- There should be increased disinfection of station-based services (e.g. shared bicycles)
- E-scooter and e-bike rental companies should disinfect scooters and bicycles at least with each battery change

2.3.2 Dealing with the crisis: initial measures

With the arrival of COVID-19, new mobility services had to adapt their core services rapidly to align with physical distancing measures. Additionally, shared mobility providers had to reassess how to safely transport passengers in vehicles used consecutively by different people. Moreover, the lockdown also resulted in a massive drop of usage numbers with severe impact on revenue.

As a consequence, some operators took the drastic decision to completely shut down operations and remove their vehicles from the streets. Operators such as Bird, Lime or Tier paused operations in cities around the world^{40 41}. While e-scooters and bikes allow physical distancing, their shared use makes it vital to address the issue of disinfection of contact points (Belingheri et al., 2020). In order to reduce the spread of the virus, operators introduced additional health & safety measures, such as extra cleaning, daily sanitizing, booking control and additional phone services to improve communication⁴².

2.3.3 Opportunities for shared mobility

With public transport services operating at reduced capacity, local authorities will need solutions to ease the pressure on public transport while simultaneously cutting traffic congestion and pollution e.g. to remove pressure from trams, metros and buses, to spread capacity, and shift travellers to shared bikes, e-bikes and e-scooters. While public transport will undoubtedly remain the backbone of urban mobility, shared mobility presents itself as a key alternative to help increase the capacity of mobility systems while allowing for greater sanitizing control and physical distancing.

Several cities and shared mobility providers saw an opportunity with the crisis and opted to repurpose their fleets to support essential workers and others that still needed to move around. In Berlin and London, state-sponsored bike-sharing companies offered free rides for healthcare professionals and other essential workers⁴³. Budapest adopted a drastic reduction of the price for the monthly subscription to MOL Bubi - the city bike-sharing system – which, coupled with the new bike lanes, prompted a big increase in the use of the bike-sharing system⁴⁴.

In some cities, local regulations had prevented ride-hailing companies, taxis, and shared mobility services from delivering products. However, by amending regulations and connecting companies with local businesses, cities such as Rome and Lisbon created new partnerships, with some ride-hailing and taxi companies starting to carry out deliveries⁴⁵.

Public bike-sharing systems should be expanded, increasing both the number of bikes available and the extent of the network and reducing fees for users. In the post-lockdown landscape, cities are deploying services such as long-term electric bike rental systems (e.g. Veligo Location by Ile-de-France⁴⁶), incentives for purchasing bikes, e-bikes or cargo bikes, and measures to facilitate on-street parking for bicycles (e.g. *Lisboa Ciclável* programme)⁴⁷.

⁴⁰ Techcrunch, [Voi, the European e-scooter rentals startup, 'pauses' operations in several countries](#)

⁴¹ Mckinsey, [The impact of COVID-19 on future mobility solutions](#)

⁴² City of Tucson, [What to know: COVID-19 & Shared Mobility](#)

⁴³ Der Tagesspiegel, [Fahrradläden bleiben offen, Nextbike-Leihräder werden günstiger](#); PBSC, [Cycling and bike-share take centre](#)

⁴⁴ Budapest, [More simple MOL Bubi service during the COVID-19 pandemic: online registration and a monthly fee of HUF 100](#)

⁴⁵ POLIS network, [Post-Lockdown Mobility webinar report: Urban logistics in lockdown](#);

[Post-Lockdown Mobility webinar report: Sharing is \(Still\) Good](#)

⁴⁶ POLIS network, [Post-Lockdown Mobility webinar report: The post-lockdown strategies of Rome and Ile-de-France](#)

⁴⁷ POLIS network, [Lisbon launches new measures to put people first post-lockdown](#)

The limited capacity to carry cargo on e-scooters did not prevent micromobility providers, such as Voi or Dott, from launching B2B partnerships, which have been useful in the delivery of products⁴⁸. By reinventing their business models in response to the crisis, private companies have demonstrated a high degree of creativity and have shown how valuable they can be for cities.

Good practice	<p>Billy Bike, Brussels</p> <p><i>The Brussels-based e-bike-sharing company Billy Bike saw the number of people using its bikes triple compared to pre-lockdown numbers, after their competitors withdrew their services. With public transport services reduced in Brussels, people looked for sustainable alternatives to carry out short- and medium-distance daily journeys. Shared e-bikes have proven a useful alternative mode during this period where the availability and extent of public transport is limited. In order to expand their services, the company has invited users to become shareholders as a first step in the direction of helping bike-sharing become a true pillar of public transport. The initiative has been received very positively, showing that shared mobility is a relevant alternative in the city and can contribute to solving the many transport-related challenges it faces⁴⁹.</i></p>
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Ensuring the financial viability of the shared mobility sector

We have seen see that the commercial shared mobility services have been hit hard by the crisis, but financing could now potentially come from a new source: cities. A shift from imposing fees on shared mobility operators to subsidising free-floating operators could be one solution⁵⁰.

At the same time, to attract more users and increase the affordability of the services, operators should share information and data about usage of their fleets with cities, suspend the payment of some operational fees (e.g. unlocking fees) and local authorities could step in by subsidising trips and freeing operators from paying vehicle ownership, license and storage fees. Such measures can also contribute to other urban challenges such as improving accessibility and reducing congestion, as it is the case in Flanders. There, users pay half of their bike share trip and the government subsidises the rest, attracting more users to the system and motivating private providers to grow and expand⁵¹.

2.3.4 Looking into the future: MaaS, multimodality and integration

As a direct result of the crisis, we have seen transport users adapting their travel and working habits, companies expanding their functions beyond the transport of people to deliver goods, and a more systematic effort by companies to share data to help governments in their response to the pandemic. Building upon this momentum can help pave the way to finally embrace multimodality and full integration in transportation, which could also present important opportunities for accelerating the rollout of MaaS.

From a local administration perspective, MaaS could alleviate some pressure from public transport systems by making better use of existing services and better connecting public transport with their users, which, in turn, would offer important cost savings in times of financial vulnerability. MaaS applications were also able to provide information on safety measures, by enabling access to detailed real-time information on the relative 'safety' of different trips (e.g., crowding levels, time-in-transit and frequency of cleaning) in order to guarantee that passengers can make informed travel decisions. (Serafimova,

⁴⁸ Urban Mobility Daily, [Shared mobility, rebooted](#)

⁴⁹ Brussels Times, [Billy Bike crowdfunds to become a real public transportation](#); POLIS network, [Post-Lockdown Mobility webinar report: Sharing is \(Still\) Good](#)

⁵⁰ The next web, [How to reboot shared mobility in a post-pandemic world](#)

⁵¹ New Mobility News, [Commuting subsidy for Flemish bikers](#)

2020). Given its multimodal nature, MaaS enables alternative ways of moving people, thus enhancing the flexibility, reliability and overall efficiency of the mobility network and the communities it serves⁵².

⁵² Sochor et al., [Implementing Mobility as a Service: Challenges in Integrating User, Commercial, and Societal Perspectives](#)

3. Planning-related, immediate actions post-lockdown

3.1 Planning process

What is SUMP?⁵³

SUMP is a continual planning process at the local or regional level for sustainable urban mobility. The process is characterised by cooperation, goal-orientation and integration. Through the collaboration of actors and decision-makers from transport-related sectors, from the district to the national level, there is a coordination of activities with mobility relevance for the local and regional level. This coordination is based on sustainable mobility objectives and policies, and measures defined by the stakeholders. Established working structures support and coordinate the measure implementation process and monitoring of progress. Shared objectives and agreed mobility strategies facilitate the legitimisation of sustainable mobility solutions and lead to improved access to funding for prioritised measures.



During a crisis period directly affecting mobility, where immediate action is required, such as the COVID-19 pandemic, SUMP could serve as the leading process for local and regional coordination of mobility measure implementation. The crisis has the potential to raise awareness among local and regional actors that integrated processes are necessary and support a rapid response in a coordinated manner.

COVID-19 has affected integrated planning processes. In particular, more agile planning is required, and a built-in ability to adjust comprehensive or sector plans and processes to take into account threats and opportunities. The next chapters present critical hurdles and solutions for the planning process. The pandemic presents an opportunity for a better "new normal" as our established systems are shaken up and new practice is brought forward for testing. It can potentially become a switching point from one

⁵³ ELTIS, [Guidelines For Developing and Implementing a Sustainable Urban Mobility Plan](#)

trajectory to another – especially if space can be redistributed permanently to sustainable transport modes and investments in their infrastructure be achieved.

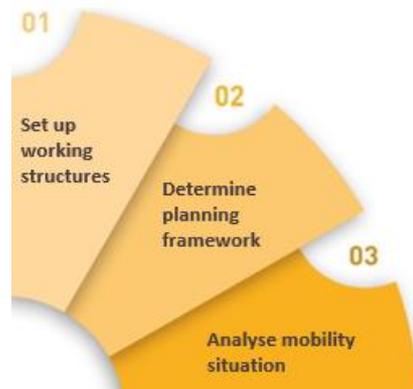
3.1.1 Cooperation and engagement

Under current circumstances, it is important to consider some key steps to make sure to advance in the right direction.

Adjusting working and management structures

As a result of the disruptions, we need to adjust the working and management structures, particularly for the SUMP management team:

- evaluate the available human resources, and the involvement of different institutions and the new priorities in the SUMP.
- include key actors such as representatives of the health sector and groups severely affected by the pandemic (e.g. the business sector, especially small local businesses, the tourism and the culture sectors).



The SUMP leadership should strengthen the capacity of the team to act strategically despite the current circumstances. Planning processes also need to be more agile:

- 'Sprints' (short, repeatable phases producing drafts and workable versions) are recommended for quick responses and increased flexibility.
- Timelines and work plans have to be re-organised and adjusted considering first of all the main priorities and the key activities for the progress of the SUMP. Such activities may need to be adapted in terms of time, specific actions, actors involved, formats to be delivered, etc. while other non-essential activities can be postponed or cancelled.
- Remote communication within the SUMP management team, with familiar working tools (agenda, minutes, moderator, etc.) to reduce stress and enhance collaboration within the team and the sectors represented.

Re-imagining participatory processes

Participatory processes are at the core of SUMP and ensure social and political ownership. Physical distancing is a challenge for participatory processes, which were already considered challenging before this crisis. However, we have an opportunity to re-invent the format of participatory processes during and beyond the current situation. For example, virtual formats can work for now, and 'hybrid' engagement processes can be planned in the future. We suggest adjusting the participatory processes in three different ways.



Figure 2 – Arup’s digest of an online hearing

1. Evaluate the timing of participatory processes and essential and non-essential activities foreseen in the short-term. This analysis will provide a shortlist of selected activities.

2. Once priorities have been identified, other aspects including objectives, targets, resources and outcomes, should be carefully reviewed and adjusted according to what can actually be delivered in the current circumstances.
3. Looking at different formats and technologies, given the broad range of tools available for virtual teleconferencing, training, focus groups, interviewing, etc. It is essential to consider technology barriers, such as limited internet availability in certain contexts (rural areas, emerging economies) or limited literacy, and to propose alternatives.

Provide information on positive changes, and on the progress in coping with the impacts of the pandemic. Therefore, rather than shutting down communication, it is better to communicate regularly, and to engage with the public their needs and insights for the future.

3.1.2 Strategy development

Adapting scenarios

Under the current circumstances, it is quite complex to define how the future will look or to forecast mobility demand in the long-term. Nonetheless, the current crisis has made us reflect on how resilient our transport systems are. Scenario development then plays a significant role in re-thinking the possible futures of our cities and taking steps to achieve our desired option. Now is the time to raise the all-important question 'what if?' to push our cities in the right direction. Re-think and reconsider the desired futures scenario, not only within the SUMP management team, but especially with key stakeholders and broader society.



Visioning resilience for now and the future

Only 'agile mobility systems' that can cover a variety of needs will be resilient enough to enable the mobility of users during a crisis situation. This should be the focus: how do we build such agile systems?

Visioning exercises, together with scenario planning, enable us to clearly define the direction for our city and its SUMP. This allows us to imagine a new future for our cities that can offer better opportunities, services, public spaces, transport systems, accessibility with equity, cleaner air, better health conditions and people-oriented solutions.

- Vision building should now be focused on resilience, as a critical factor for recovery in the short-term and the ability to thrive in the long run.
- At this stage, it is essential to differentiate between immediate needs and long-term demands. This will dictate the priorities for recovery and a transformational change in the future.
- Envisage a green recovery, centred around the principles of social co-benefits and equity. SUMP's can also boost economic recovery needed by establishing a list of feasible and sustainable mobility measures (eventually including infrastructure that will generate jobs, incentives for small businesses, innovation, etc.).

3.1.3 Measure planning

Plan immediate actions for post-lockdown

With reduced capacity in public transport over the coming months due to the need for physical distancing, the main alternatives are walking, cycling or the private car⁵⁴. If the majority of public transport users switch to cars post-lockdown, our cities will quickly choke with cars and emissions. Immediate actions for lockdown could try to prevent this.

- If your city already has a SUMP, then you already have a plan to guide when loosening the lockdown. Your task then is to look at what you have planned and see if you need to refocus your priorities. The recommendation is to adjust, but not to "throw the baby out with the bathwater". Most of the agreed priorities for long-term change will probably remain important.
- If your city has not yet developed a SUMP (or similar plan), it may help you to keep the eight SUMP principles⁵⁵ in mind as you consider which quick actions are possible and appropriate for your city.



A willingness to experiment

Unprecedented times often require novel approaches. Cities can use this opportunity to experiment with measures that would not otherwise be possible. Emergency measures can be a first step. The real-life experience of temporary measures can help to win over hearts and minds.

Find low-cost, low-hardware solutions and creative pop-up options. Note that large, expensive infrastructure can be a misguided investment. People-focused mobility solutions can be inexpensive; prioritise these!

Fast-tracking longstanding plans

Scan what is in the pipeline (drawer), what can be advanced, and what has to be re-scheduled/postponed). Some options may be *better* suited for implementation. For example, construction projects might be easier because of lower traffic volumes, shops being closed anyway (no risk of suffering additional revenue loss), few people on the street.

When fast-tracking, as with implementation in general, it is important to carefully coordinate all implementation activities (Step 10.1 of the SUMP cycle, "Coordinate implementation of actions"). Step 8.3 also comes into play here: "Agree priorities, responsibilities and timeline."

Coordinate (new) mobility measures

Quick implementation does not mean unplanned or uncoordinated implementation. It is important to maintain an overview of the measures being considered by various departments and bodies so that priorities remain coherent and align with the city's general SUMP strategy. If this does not happen, you may end up with conflicting measures. As a result, times of quick change such as the current Covid-19

⁵⁴ In the case of cars, preferably zero or low emission vehicles. But even those use the limited space inefficiently and cause congestion.

⁵⁵ ELTIS, [The SUMP Concept and Guidelines](#)

pandemic are busy times for the SUMP management team. The speed of change requires dedication and effort to stay on top of things – as well as close collaboration with colleagues in other departments.

If your city does not have a SUMP, some basic tips for a successful "copy-and-paste" may help:

1. Look at cities that are structurally similar to yours and that have been similarly affected by Covid-19.
2. Keep the SUMP principles in mind.
3. Assess and select measures according to your city's established priorities, which might have slightly changed (e.g. with a stronger focus on health and resilience).

Learn for your planning methods

The fact that measures are possible that we would not have believed just a few short months ago teaches a lesson for planning cycles in general. Measure planning often means preparing for a window of opportunity. Your task as a strategic transport planner is to prepare a set of measures that helps achieve the agreed priorities of the city. Some of them might not have enough support at the moment, but if you have a good portfolio prepared, it allows you to quickly react and put a suitable measure forward once circumstances change.

COVID-19 has demonstrated the value of quick and experimental mobility measures, low-cost and low-hardware solutions and creative pop-up ideas. One of the lessons could be to use such measures more frequently also in non-crisis periods. This is a learning process in tactical urbanism and placemaking. Planning departments will have to test and continually improve this type of experimentation, and repeatedly explain the benefits to politicians.

Communicate clearly

In all your activities during and after the crisis, communicate clearly:

- For temporary measures, communicate the reasons and the positive impacts expected, including indirect health benefits.
- This serves to increase acceptance and may help build support in the mid-term for keeping the measures you want to make permanent.
- Personal experience of street space reallocation may help people see the advantages of their city streets with less noise and pollution.

3.1.4 Implementation

The various steps of the SUMP cycle can serve as inspiration for implementation actions in a crisis situation. In fact, the leadership required for the implementation of crisis-averting measures implies clarity and transparent communication regarding items to prioritise or de-prioritise. Similarly, Step 10.1 highlights the importance of "Coordination implementation of actions." It is extremely important to keep a central overview of all measures to ensure that they are all consistent and complimentary.

This not to hide the fact that the implementation of measures during a crisis such as the COVID-19 pandemic is inherently challenging for a number of reasons:

- There might simply be other priorities to save lives here and now;
- Financial resources might be reassessed and reallocated;
- Staff might be channelled to other projects;



- The procurement of goods and services can be difficult; the production of supplies could be on hold;
- Construction works might be difficult because of physical distance requirements.

But this is not the right point to dwell on difficulties. The following sections therefore contain thoughts and ideas about what could be done in practice.

Emergency measures that could stick

In numerous cities, emergency measures have been put in place to cope with different travel demands. One way to harness this pivotal situation is to allow these emergency travel solutions to become permanent. Make sure you capture the moment by quickly making sustainable alternatives safe and convenient – and talk about it.

Safe active mobility, cycling and walking has additional health benefits.

Yet, in Europe, it is estimated that 25% of women and 22% of men are physically inactive. Physical inactivity (lack of physical activity) has been identified as the fourth leading risk factor for global mortality (6% of deaths globally). Moreover, physical inactivity is estimated to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of ischaemic heart disease burden⁵⁶.

While fully respecting lockdown measures, encouraging cycling and walking supports the public health goal of hindering the spread of COVID-19. Improved physical and mental health and maintaining strong immune systems is crucial. Physical activity increases the effectiveness of the immune system, and reduces the risk of cardiovascular diseases, several cancers, dementia, chronic diseases, and diabetes.

Enhanced public acceptance

Taking space away from cars is almost always a controversial decision, which is often raised at election time. Crises tend to enhance public acceptance for (well argued – e.g. physical distance) interventions which would normally meet with resistance, e.g. taking away space from cars in favour of cycling and walking. The exceptional circumstances posed by the pandemic have created a window of opportunity. During and post lockdown, people have experienced the joy of cycling, of streets without congestion, and of breathing cleaner air. This is a period of incredible momentum to gain people's support for controversial or emergency measures to become permanent – because people have already experienced these measures in real life. Proactive communication is key here. SUMP step 11.2 comes into play here: "Inform and engage with citizens and stakeholders."

3.1.5 Evaluation and monitoring

Monitoring and evaluation of the overall SUMP objectives (see Activity 6.1)

Aside from causing a need for physical distancing, the COVID-19 situation radically altered the factors that drive mobility; most significantly economy, health, education, and leisure, all of which have a strong influence on transport demand of persons and goods. For the monitoring and interpretation of the observed values of strategic indicators, it is important to add some qualitative considerations. The table below presents some short examples.

⁵⁶ WHO, [Global Strategy on Diet, Physical Activity and Health](#)

Mobility related evolution	Strategic indicator	COVID-19 influence
Road safety	Deaths and serious injuries	<ul style="list-style-type: none"> • Less activity (economic, education, leisure, etc.) and more remote work, less passenger and goods transport on the road results in less collisions • Higher speeds, and more severe collisions with more relative road deaths, resulting in almost the same level of total deaths as before
Use of active modes	Number of cyclists Share of cycling in daily trips	<ul style="list-style-type: none"> • Less activity and more remote work, fewer trips • Higher share of cycling because of perceived safety of cycling (individual, in open air, healthy, etc.)
Use of public transport	Number of public transport users Share of public transport in daily trips	<ul style="list-style-type: none"> • Less activity and more remote work, fewer trips • Lower share of public transport because of perceived health risks of public transport (shared, in a closed space, close to other users, etc.)
Air quality	Emissions of passenger and freight transport modes Reduced healthcare costs linked to air pollution related diseases	<ul style="list-style-type: none"> • Less activity and more remote work, fewer trips, less passenger and goods transport • Higher share of private cars shifting from public transport • mitigate the impact of air pollution on COVID-19 patients⁵⁷

Accounting for the observed and estimated influence of COVID-19 in the value of strategic indicators facilitates a more accurate evaluation process. Information on the participation in activities collected by Google and others⁵⁸ can give an indication of the changes in activities.

Further on, there will be a need for additional ex-ante evaluations to describe the expected mobility situations and related impacts on environment and economy as well as the impact on health both in terms of social benefits as well as reduced healthcare costs linked to reduced pollution.

For both the analysis of the current situation and the estimation of the future situation, it important to rethink the indicators. Do they already capture crisis-related phenomena? For example, adding an indicator on "possible distance on sidewalks" or "perceived hygienic situation of commuters" can be useful. Also, measuring people's awareness and acceptance of different travel and transport possibilities is more important than ever, since this is an important and changing factor.

Monitoring and evaluation of the measure objectives (see Activity 7.3)

The monitoring and evaluation of measures defined in the SUMP face challenges because the context of the measures is dramatically changed by the COVID-19 situation, and it will continue to evolve in the coming months.

Approaches comparable to that for strategic indicators can be used to develop an improved understanding of the observed impact indicators and to add quantified windows for the values of the measured indicators.

If the measure was recently implemented, the baseline situation presents an additional dilemma comparable with the new COVID-19 pushed measures (see below).

⁵⁷ EPHA, [Air pollution caused conditions: the risk of co-morbidities](#)

⁵⁸ Google, [Mobility and COVID-19](#)

Evaluation of pop-up measures and new/emergency measures

As already acknowledged, the COVID-19 situation resulted in a range of pop-up and new/emergency measures. Cities can (and have!) use this opportunity to try out things that would not otherwise be possible. Temporary piloting can be a first step. The real-life experience of emergency measures can change the perception and acceptance levels of involved citizens and stakeholders. However, using this momentum to come to permanent changes in the way we organise our mobility requires a strong evaluation process as a basis for well-motivated choices in urban policy. The following factors need to be considered:

- A need for easy and quick evaluation approaches to support intermediate decisions and avoid that pilots are stopped before assessing benefits and possible negative impacts
- Lack of extensive data collection
- Future changes in the impacts due to evolutions in the COVID-19 situation and related behaviour rules and perceptions
- The challenge of no or limited baseline measurements

With these limitations to the evaluation approach, it is necessary to focus the evaluation activities on the most important aspects to give a useful understanding of the pros and cons of a measure and what can be learned from temporary measures:

- Since the COVID-19 situation is not the typical context for the implementation of a measure, we can limit the process evaluation to the registration of which factors were driving the idea to implement the measure e.g. need for more space on sidewalks.
- Since the measures are in many cases on a small scale, we can apply a sharper focus on what to evaluate, with a limited number of indicators showing local impacts
- Since the collection of before (baseline) and after measurements is often not possible (too late, not enough resources, etc.) it is recommended to spend more effort on collecting the opinions of users and stakeholders (user groups, service providers and representatives of activities) on the mobility changes. With a good balance of the types of users and stakeholders, a solid understanding of the pros and cons of the measure can be built up.
- Since awareness and acceptance levels can add value to temporary measures, this aspect should be taken into account.

Probably most important point of attention is a good and transparent structuring the information that can be acquired (e.g. the mobility data we can collect and users and stakeholders we can question) as a basis for a qualitative assessment of the impact of the measure.

These considerations can result in a possible approach in the following steps:

1. Selection of relevant aspects to be assessed limited to the aspects considered most relevant at local level. Relevant impact categories are e.g. the functioning and usage of the intermodal mobility system (walking, cycling, buses, trams, and cars), safety, air quality, and local economy.
2. Observations by the mobility department with a qualitative appraisal and limited counts of the number of pedestrians, cyclists, public transport users and cars on well-chosen locations and moments
3. Survey of passing cyclists, pedestrians, public transport users at stops and car drivers at parking areas
4. Survey of visitors at activity poles e.g. offices, shops
5. Interview of main stakeholders: service providers, user representatives and activity representatives
6. Synthesis per relevant aspect
7. Advice on whether to maintain the measure, optimise it, implement it elsewhere, or abandon it

8. Such an approach can further be facilitated by providing an easy and compact knowledge gathering and reporting tool, helping local workers to implement such an evaluation in an efficient and well-structured way.

Depending on the complexity of the measure and the context, and taking into account the resources and time, steps can be skipped or limited. But the structuring of the aspects and the available knowledge should explicitly discussed in order to maintain a well-balanced documentation and motivation of choices.

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